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EXAMINER

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Please find below and/or attached an Office communication concerning this application or proceeding.

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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte ERNST RYTZ and HANS-RUDOLF GUBLER

Appeal 2009-004990
Application 10/018,609
Technology Center 3700

Decided: February 26, 2010

Before: LINDA E. HORNER, JOHN C. KERINS, and KEN B. BARRETT,
Administrative Patent Judges.

HORNER, *Administrative Patent Judge.*

DECISION ON APPEAL

STATEMENT OF THE CASE

Ernst Rytz et al. (Appellants) seek our review under 35 U.S.C. § 134 (2006) of the Examiner's decision rejecting claims 1-4, 7, and 10, which are all of the pending claims. We have jurisdiction under 35 U.S.C. § 6(b) (2006). We REVERSE.

Appellants' claimed invention is an apparatus for the fine blanking of workpieces from a material. Spec. 1:3-4. In fine blanking, a workpiece is sandwiched between a press plate and blanking punch or die plate on the top, and a counterholder on the bottom. Spec. 1:16-18. The apparatus cuts the workpiece by simultaneously applying pressure from the top, such as via a V-ring cylinder, and from the bottom via a ram. Spec. 1:18-2:9.

Appellants' claimed invention is intended to provide an apparatus of simplified construction that compensates for the force of the V-ring cylinder in a simple manner by hydraulically connecting the V-ring cylinder to a compensation cylinder linked to the ram, so that the V-ring cylinder and the compensation cylinder are in hydraulic equilibrium. Spec. 3:8-17.

Appellants seek review of the Examiner's rejections of: (1) claims 1-3, 7, and 10 under 35 U.S.C. § 103(a) as unpatentable over U.S. Patent No. 3,570,343 to Wolnosky (issued Mar. 16, 1971) and U.S. Patent No. 4,905,556 to Haack (issued Mar. 6, 1990); and (2) claim 4 under 35 U.S.C. § 103(a) as unpatentable over Wolnosky, Haack, and U.S. Patent No. 6,240,818 B1 to Baltschun (issued Jun. 5, 2001).

The Examiner found Wolnosky discloses the apparatus of independent claims 1 and 10, except Wolnosky does not disclose a hydraulic connection between the compensation cylinders and the V-ring cylinder. Ans. 3. The Examiner found Haack discloses an apparatus for blanking where the upper and lower die shoes are hydraulically connected. Ans. 3. The Examiner concluded it would have been obvious to modify Wolnosky's device to include a hydraulic connection from the V-ring cylinder (the upper cylinder) to the compensation cylinder (a lower cylinder), as taught by Haack, to reach

the subject matter of independent claims 1 and 10. Ans. 3. The Examiner also concluded that the subject matter of claim 4, i.e., having equal effective cross-section areas of the compensation piston and V-ring piston, would have been obvious over Wolnosky and Haack in combination with Baltschun. Ans. 3-4.

Appellants contend Haack does not disclose a hydraulic connection from the upper to the lower cylinders of an apparatus for fine blanking workpieces so that the proposed combination does not disclose a hydraulic connection from the V-ring cylinder to a compensation cylinder that provides hydraulic equilibrium, as claimed. App. Br. 6-8.

The issue presented by this appeal is whether Haack discloses a hydraulic connection from the upper to the lower cylinders of an apparatus for fine blanking workpieces.

Independent claims 1 and 10 include a V-ring cylinder and a ram supported against at least one compensation cylinder. A hydraulic connection between the compensation cylinder and the V-ring cylinder maintains the cylinders in hydraulic equilibrium. Appellants' Specification describes the hydraulic connection between the compensation cylinder and the V-ring cylinder as putting the two cylinders in hydraulic equilibrium, meaning the force of the V-ring cylinder is absorbed and compensated for by the compensation cylinder during each ram stroke so that the force has no effect on the ram stroke. Spec. 3:15-20. Thus, claims 1 and 10 require at least one compensation cylinder hydraulically connected to a V-ring cylinder so that the force of the V-ring cylinder is absorbed and compensated for by the compensation cylinder during each ram stroke so that the force has no effect on the ram stroke.

Haack discloses a press for the machining of sheet-metal workpieces. Haack, col. 1, ll. 4-6. Haack's precision blanking tool is comprised of an upper part 2 including a hydraulic unit 4, and a lower part 3 including a hydraulic unit 4'. Haack, col. 2, ll. 44-46, 52-53; fig. 3. Hydraulic units 4 and 4' deliver pressurized oil via valves 57 and connections 5 to their respective cylinders 13, 14 and 15, 16. Haack, col. 2, l. 65 to col. 3, l. 2. Cylinders 13, 14, 15, and 16 "act independent of one another." Haack, col. 3, ll. 2-3; fig. 3.

Cylinder pairs 13, 14 and 15, 16 each have independent hydraulic connections; however, contrary to the Examiner's finding (Ans. 3), Haack does not disclose that upper cylinder pair 13, 14 is hydraulically connected to lower cylinder pair 15, 16 in a manner that provides hydraulic equilibrium between the upper and lower cylinders. Haack, col. 3, ll. 2-3; fig. 3.

Because Haack does not disclose upper and lower cylinders that are hydraulically connected in the manner claimed, the proposed combination contains no suggestion to hydraulically connect Wolnosky's compensation and V-ring cylinders. See Ans. 3. Therefore, the proposed combination does not include at least one compensation cylinder hydraulically connected to a V-ring cylinder so that the force of the V-ring cylinder is absorbed and compensated for by the compensation cylinder during each ram stroke so that the force has no effect on the ram stroke as required by claims 1 and 10.

Thus, the rejection of claims 1 and 10 is in error. The rejection of claims 2, 3 and 7 is also in error by virtue of their dependence from claim 1. The rejection of claim 4 is also in error because it relies upon the same

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erroneous finding of fact regarding Haack.¹

We REVERSE the Examiner's decision to reject claims 1-4, 7, and
10.

REVERSED

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¹ The rejection does not find that Baltschun corrects this deficiency in the proposed combination of Haack and Wolnosky. Ans. *passim*.